

2000 Government/Industry Diminishing Manufacturing Sources & Material Shortages (DMSMS) Workshop

Sponsor: Defense Microelectronics Activity (DMEA)
Site: Sawgrass Marriott Resort in Ponte Vedra Beach, Florida
Date: August 25, 2000 (Morning)
Cost: There will be no fee for participating in this workshop.

Microelectronics DMSMS is increasingly impacting DoD weapon systems. F-22, B-2, and F-18 obsolescence problems have been identified in Defense Acquisition Board Reviews. The commercial electronics industry is overwhelmingly driving the semiconductor marketplace and DoD has less than one-tenth of 1% of that market. There is wide concern over how DoD/Industry need to address increasing microelectronics obsolescence. DMEA was assigned as Executive Agent for DoD Microelectronics DMSMS to coordinate DMSMS activities and recommend DoD policy changes that would mitigate DMSMS problems. DMEA conducted the initial Government/ Industry DMSMS Workshop in October 1999. Four main areas of concern were identified from that workshop: best practices, acquisition guidelines, leveraging, and strategies for the use of commercial parts. DMEA has been working these issues by coordinating government and industry members in the distribution of best practices and acquisition guidelines, and in government/industry working groups to discuss methods for using commercial parts.

The objective of this DoD/Industry workshop on Microelectronics DMSMS is to identify and discuss technical, management, funding, contractual, and/or policy issues of concern, and formulate a strategy for resolving these issues. This strategy could include--but not be limited to--establishment of ad-hoc government/industry committees and recommendation of new and revised DoD policy. Although the forum will discuss issues involving microelectronics, the programmatic, funding, contractual, and policy issues will be applicable to non-microelectronics, and future forums could address non-microelectronics. This workshop will be divided into two sessions.

The first session will involve a discussion of DMSMS management best practices. In the environment of acquisition reform, it is necessary to advance ideas on what steps will be necessary to ensure that prime contractors will accept and implement such best practices.

Some of the burning questions that will be addressed are: What are the best practices of DMSMS management? What design practices should be performed during the development phase to mitigate future obsolescence? Does the level of DMSMS management change if the system is in the production phase versus the sustainment phase? What is the appropriate level of DMSMS management for my program? How do I encourage (or direct) the contractor to make DMSMS management a part of his proposal? Are there any common practices DoD can learn from the Commercial Airlines industry?

Tentative Panel Members: representative from the Army's Abrams Program Office; representative from ARINC who is developing a Program Manager's Handbook on Common Practices to Mitigate the Risk of Obsolescence; representative of GEIA who's developing industry guidelines for

DMSMS Best Practices; and a representative of Boeing who can provide comparisons of DMSMS management practices between Commercial Airlines and the Military.

The second session will concentrate on the development of guidelines for the use of commercial parts in DoD weapon systems. Conversation will explore the different parts management strategies being developed for the use of Commercial parts. Specific discussion points will include the GEIA G-12 Committee's initiative related to PEMs (Plastic Encapsulated Microcircuits), IECQ-AWG initiatives for using parts outside their temperature range, the ongoing DSCC initiatives on the use of QML processes, and other government/defense industry initiatives.

Some of the questions to be addressed will be: What is the status of QML and why can't the military build systems based on QML? What are the advantages and limitations of commercial parts? How does DoD support the weapon system when commercial parts become obsolete? Why do we need to use commercial parts outside their temperature range? How does DoD address the reliability of commercial parts?

Tentative Panel Members: representative of Defense Supply Center Columbus; representative of the IECQ-AWG efforts on standardization of using commercial parts outside their temperature range; representative of Raytheon; representative of an Army program office.

This workshop will operate in an interactive nature between panel members and audience participants. Informal question and answer sessions will be conducted to encourage a productive, real-time environment. At the end of the workshop DMEA will gather action items from the main discussion points of the day, develop and distribute minutes of the proceedings to participants, and determine areas on which to focus its efforts through the following workshop that is tentatively scheduled for June 2001.